Luke Air Force Base NPL

Size: 4.198 acres

Mission:Provide advanced F-16 fighter trainingHRS Score:37.93; placed on NPL in August 1990

IAG Status: Federal Facility Agreement signed in September 1990

Contaminants: Petroleum/oil/lubricants, waste solvents, waste oils, general refuse,

lead, and chromium

Media Affected: Groundwater and soil

Funding to Date: \$18.2 million

Estimated Cost to Completion (Completion Year): \$0.1 million (FY2004)
Final Remedy in Place or Response Complete Date for All Sites: FY1999



Glendale, Arizona

Restoration Background

Historically, Luke Air Force Base has provided advanced training to fighter pilots. The current mission of the 56th Fighter Wing, the host unit at the installation, is to provide combat crew training for F-16 aircraft personnel in addition to aircraft maintenance, training, and engineering support.

Thirty-one sites were identified at the installation. These were later consolidated into two operable units (OUs). Site types include fire training areas, disposal trenches, landfills, spill sites, and surface drainage canals. Soil is the primary affected medium. Petroleum/oil/lubricants, waste solvents, and waste oils have been identified in disposal trenches and in the fire training area. Interim Actions have included removal of three underground storage tanks, use of soil vapor extraction (SVE) to clean up contaminated soil at the North Fire Training Area, and stabilization of the bank of a landfill adjacent to the Agua Fria River.

In FY91 and FY92, the installation completed final Remedial Investigation and Feasibility Study (RI/FS) work plans and field sampling plans. An interim RI report for OU1 and a final RI report for OU2 were submitted to, and approved by, the regulatory agencies. In FY93, a new site at the fuel handling area was added to OU1, and a final FS report was submitted to, and approved by, EPA and the state regulatory agency.

In FY94, the installation completed RI fieldwork and submitted a draft report to regulators. A Record of Decision (ROD) for OU2 was signed directing cleanup of one site by soil bioremediation and the continuing maintenance, and inspection for 30 years, of a concrete cap at another site. In FY95, the installation completed construction for the Phase I Remedial Action at OU2. The installation also began a Treatability Study of bioventing at OU1 and agreed with EPA and the

state regulatory agency to perform a Focused Feasibility Study of such generic remedies as soil bioremediation, SVE, and institutional controls (ICs). A technical review committee was formed and converted to a Restoration Advisory Board (RAB). The RAB includes 24 members representing the community.

In FY96, soil at OU2 was composted to treat off-base contamination with benzo(a)pyrene, and soil was sampled to support a Phase II Remedial Design for composting on-base contamination. The installation also deployed an internal combustion engine (ICE) for SVE cleanup of soil contaminated with jet fuel in the bulk fuels storage area of OU1. In FY97, remediation of contamination at OU2 was completed. The RAB reviewed and commented on programming and budget execution plans, and RAB members visited the site where the ICE SVE technology was in use and received a briefing on the operation.

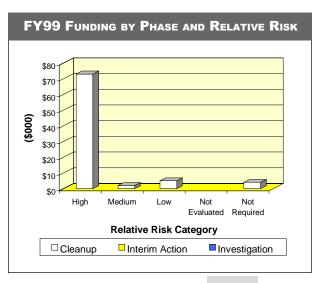
FY98 Restoration Progress

The installation and the RAB developed a community outreach program and video to highlight the installation's restoration progress for the public. The installation was awarded the General Thomas D. White Environmental Restoration Award for HQAETC.

An ICE was used at OU1, and the RI and the FS were completed. The ROD will be signed by the end of 1998. The groundwater sampling and analysis plan was revised, and work began on the project.

Plan of Action

- Initiate use of ICs at LF-03, LF-25, FT-07, DP-13, and SD-38 in FY99
- Begin delisting process for the installation in FY99
- Prepare RA reports and a final closeout report for OUs 1 and 2 in FY99



Air Force